

WHAT IS CLAIMED IS:

1. An information recording medium for recording at least copyrighted content information and cipher key information,

5 wherein a part of said content information is scrambled and recorded in said information recording medium, and

wherein the scrambled and recorded part of the content information is obtained through scrambling using scramble key information, which is obtained by converting said cipher key information by the use of a non-scrambled part of said content information.

10 2. The information recording medium as claimed in claim 1, wherein the non-scrambled part of said content information for generating said scramble key information includes at least copy control information.

15 3. The information recording medium as claimed in claim 1, wherein said information recording medium comprises a recording area divided into a plurality of sectors,

wherein a plurality of data which said content information is divided into are recorded in said sectors, respectively, and

20 wherein the non-scrambled part of said content information for generating said scramble key information includes said copy control information, and a part of said content information that changes sector by sector.

25 4. A method for reproducing information recorded in an information recording medium for recording at least cipher key information and content information, a part of said content information being scrambled and recorded in said information recording medium, said method including

the steps of:

decoding said cipher key information recorded in said information recording medium into decoded key information by using predetermined key information;

5 converting said decoded key information into converted decoded key information by using non-scrambled content information of said content information; and

descrambling said scrambled and recorded content information by using said converted decoded key information.

10 5. An apparatus for reproducing information recorded in an information recording medium for recording at least cipher key information and content information, a part of said content information being scrambled and recorded, said apparatus comprising:

15 cipher key information decoding means for decoding said cipher key information recorded in said information recording medium into decoded key information by using predetermined key information;

20 key information converting means for converting said decoded key information outputted from said cipher key information decoding means, into converted decoded key information by using non-scrambled content information of said content information; and

descrambling means for descrambling said scrambled and recorded content information by using said converted key information outputted from said key information converting means.

25 6. An information recording medium having at least a data recording area for recording copyrighted content information, wherein at least cipher key information and said content

information are recorded in said data recording area,

wherein a part of said content information recorded in said data recording area is scrambled and recorded, and

5 wherein the scrambled and recorded part of said content information is obtained through scrambling using scramble key information, which is obtained by converting said cipher key information by the use of a non-scrambled part of said content information.

10 7. An information recording medium having at least a data recording area and a lead-in area, copyrighted content information being recorded in said information recording medium,

wherein at least first cipher key information and said content information are recorded in said data recording area,

wherein second cipher key information is recorded in said lead-in area,

15 wherein a part of said content information recorded in said data recording area is scrambled and recorded, and

20 wherein said scrambled and recorded content information is obtained through scrambling using scramble key information, which is obtained by converting said second cipher key information by the use of a non-scrambled part of said content information.

8. The information recording medium as claimed in claim 6, wherein the non-scrambled part of said content information for generating said scramble key information includes at least copy control information.

25 9. The information recording medium as claimed in claim 7, wherein the non-scrambled part of said content information for

generating said scramble key information includes at least copy control information.

10. The information recording medium as claimed in claim 6,
wherein said information recording medium has a recording
5 area divided into a plurality of sectors,

wherein a plurality of data which said content information is
divided into are recorded in said sectors, respectively, and

wherein the non-scrambled part of said content information for
generating said scramble key information includes said copy control
10 information, and a part of said content information that changes sector by
sector.

11. The information recording medium as claimed in claim 7,
wherein said information recording medium has a recording
area divided into a plurality of sectors,

15 wherein a plurality of data which said content information is
divided into are recorded in said sectors, respectively, and

wherein the non-scrambled part of said content information for
generating said scramble key information includes said copy control
information, and a part of said content information that changes sector by
20 sector.

12. A method for reproducing information recorded in an
information recording medium having at least a data recording area and a
lead-in area, at least first cipher key information and content information
being recorded in said data recording area, second cipher key information
25 being recorded in said lead-in area, and a part of said content information
recorded in said data recording area being scrambled and recorded, said

method including the steps of:

decoding said first cipher key information stored in said data recording area into first key information by using predetermined key information;

5 decoding said second cipher key information stored in said lead-in area into second key information by using said first key information;

 converting said second key information into converted second key information by using non-scrambled content information stored in said data recording area; and

10 descrambling said scrambled and recorded content information by using said converted second key information.

 13. An apparatus for reproducing information recorded in an information recording medium having at least a data recording area and a lead-in area, at least first cipher key information and content information
15 being recorded in said data recording area, second cipher key information being recorded in said lead-in area, and a part of said content information recorded in said data recording area being scrambled and recorded, said apparatus comprising:

 first key information decoding means for decoding said first
20 cipher key information stored in said data recording area into first key information by using predetermined key information;

 second key information decoding means for decoding said second cipher key information stored in said lead-in area into second key information by using said first key information outputted from said first key information
25 decoding means;

 key converting means for converting said second key information

outputted from said second key information decoding means into converted second key information by using non-scrambled content information of said content information; and

5 descrambling means for descrambling said scrambled and recorded content information by using said converted second key information outputted from said key converting means.

14. The apparatus as claimed in claim 13,
 wherein said non-scrambled content information for converting said second key information into said converted second key information
10 includes at least copy control information.

15. An information recording medium having at least a lead-in area and a data recording area, copyrighted content information being recorded in said information recording medium,

 wherein first cipher key information is recorded in said lead-in
15 area,

 wherein at least second cipher key information and said content information are recorded in said data recording area,

 wherein a part of said content information recorded in said data recording area is scrambled and recorded, and

20 wherein said scrambled and recorded content information is obtained through scrambling using scramble key information, which is obtained by converting said second cipher key information by the use of a non-scrambled part of said content information.

16. The information recording medium as claimed in claim 15,
25 wherein said data recording area is divided into a plurality of sectors, each of which is composed of a sector header area for recording

information for identifying the sector, and a main data area for recording said content information,

wherein said second cipher key information is recorded in said sector header area,

5 wherein a part of said content information is scrambled and recorded in said main data area, and

 wherein the scrambled and recorded part of said content information is obtained through scrambling using scramble key information, which is obtained by converting said second cipher key information by the use
10 of a non-scrambled part of said content information for each sector.

 17. The information recording medium as claimed in claim 15, wherein the non-scrambled part of said content information for generating said scramble key information includes at least copy control information.

15 18. The information recording medium as claimed in claim 16, wherein the non-scrambled part of said content information for generating said scramble key information includes at least copy control information.

20 19. The information recording medium as claimed in claim 16, wherein the non-scrambled part of said content information for generating said scramble key information includes at least said copy control information, and a part of said content information that changes sector by sector.

25 20. The information recording medium as claimed in claim 15, wherein said second cipher key information recorded in said sector header area is information which is obtained by encrypting

predetermined second key information by the use of said first cipher key information recorded in said lead-in area.

21. The information recording medium as claimed in claim 16,
wherein said second cipher key information recorded in said
5 sector header area is information which is obtained by encrypting
predetermined second key information by the use of said first cipher key
information recorded in said lead-in area.

22. A method for reproducing information recorded in an
information recording medium having at least a lead-in area and a data
10 recording area, first cipher key information being recorded in said lead-in
area, at least second cipher key information and content information being
recorded in said data recording area, and a part of said content information
recorded in said data recording area being scrambled and recorded in said
information recording medium, said method including the steps of:

15 decoding said first cipher key information stored in said lead-in
area into first key information by using predetermined key information;

decoding said second cipher key information stored in said data
recording area into second key information by using said first key
information;

20 converting said second key information into converted second
key information by using non-scrambled content information stored in said
data recording area; and

descrambling said scrambled and recorded content information
by using said converted second key information.

25 23. An apparatus for reproducing information recorded in an
information recording medium having at least a lead-in area and a data

recording area, first cipher key information being recorded in said lead-in area, at least second cipher key information and content information being recorded in said data recording area, and a part of said content information recorded in said data recording area being scrambled and recorded in said information recording medium, said apparatus comprising:

first key information decoding means for decoding said first cipher key information stored in said lead-in area into first key information by using predetermined key information;

second key information decoding means for decoding said second cipher key information stored in said data recording area into second key information by using said first key information outputted from said first key information decoding means;

key information converting means for converting said second key information outputted from said second key information decoding means into converted second key information by using non-scrambled content information stored in said data recording area; and

descrambling means for descrambling said scrambled and recorded content information by using said converted second key information outputted from said key information converting means.

24. The apparatus as claimed in claim 23,
wherein a non-scrambled part of said content information includes at least copy control information.